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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,329	07/13/2007	Yasushi Miyajima	290788US8PCT	1876
22850 7590 09/12/2011 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER RAJAN, KAI				
ART UNIT 3769		PAPER NUMBER		
NOTIFICATION DATE 09/12/2011		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/579,329

**Applicant(s)**

MIYAJIMA ET AL.

**Examiner**

KAI RAJAN

**Art Unit**

3769

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 1-6,8-16,19-31,33-40,42 and 43 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-6,8-16,19-31,33-40,42 and 43 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/6/2010/1/12/2011
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

### **DETAILED ACTION**

The Examiner acknowledges the amendment filed January 12, 2011.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 12, 2011 has been entered.

#### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 2, 8 – 16, 19 – 27, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom U.S. Patent No. 6,549,756 in view of Srey et al. U.S. Patent No. 6,141,436 (“Srey”), cited by Applicant, in view of Arai et al. U.S. Patent No. 4,332,258 (“Arai”), previously cited.**

Engstrom discloses an input device, comprising:

a body having an interior portion containing electronics that are configured to perform a wireless communication including at least one of a mobile telephone communication and television remote controller communication (Engstrom column 2 lines 51 – 66 personal digital assistant (PDA) with mobile telephone capabilities); and

bioindex detecting means for detecting a pulse wave, the front face including a display screen, (Engstrom column 2 lines 51 – 67, column 3 lines 1 – 16, column 4 lines 7 – 19, figure 2 PDA contains numerous sensors along the sides of the device casing for measuring blood flow rates processed into heart rate data. PDA has a display 202 on the front);

Engstrom discloses sensors located along the side faces of the PDA, yet fails to disclose sensors located on the rear face. However, Srey a reference in an analogous art of cellular devices with embedded sensors discloses a cellular phone having a biometric sensor disposed on the rear face of the phone (see Srey figure 5). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the sensor placement of Engstrom with the rear-face sensor of Srey, since both Engstrom and Srey disclose alternate sensor placements for optimal ergonomic contact while a user is using the phone (Engstrom column 3 lines 7 – 16, Srey abstract), and it would be obvious to try different known sensor placements to improve ergonomics during data collection.

Furthermore, Engstrom and Srey disclose blood flow sensors disposed on the rear face of a cellular phone, yet fail to disclose a finger cover covering the blood flow sensor. However Arai a reference in an analogous art of portable physiological monitoring devices discloses a curved finger cover over a pulse meter (Arai figure 1 column 2 lines 51 – 55). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the rear – face blood flow sensor with the curved finger cover of Arai, since Arai states the finger cover blocks external light from interfering with blood flow sensors (Arai column 2 lines 51 – 55), thus improving measurement accuracy.

Independent claims 20 and 26 are rejected on substantially the same basis as claim 1.

Note to Applicant: See office actions dated June 3, 2010 and July 9, 2009 for rejection to unaddressed dependent claims, as they are rejected on substantially the same basis by Engstrom.

**Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom U.S. Patent No. 6,549,756 in view of Srey et al. U.S. Patent No. 6,141,436 (“Srey”), cited by Applicant, in view of Arai et al. U.S. Patent No. 4,332,258 (“Arai”), previously cited, as applied to claim 1 above, further in view of Mault et al. U.S. PGPub No. 2003/0208113.**

Regarding claim 43, Engstrom, Srey, and Arai disclose a personal digital assistant with embedded sensors on either side of the casing. Engstrom, Srey, and Arai fail to explicitly teach using the personal digital assistant for controlling of any one of electronic equipments including

personal computer, television image receiver, video and/or audio signal recording and/or reproducing device and air conditioner. However, Mault et al. a reference in an analogous art of physiological monitoring disclose a personal digital assistant used for collecting physiological data that communicates with a home computer, television, or entertainment device via wireless communication (Mault et al. paragraph 0078). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the uses of a personal digital assistant as taught by Mault et al. to the device of Engstrom, Srey, and Arai, since the structure and capabilities of personal digital assistants are equivalent.

**Claims 3, 5, 6, 28 – 31, and 33 – 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom U.S. Patent No. 6,549,756 in view of Srey et al. U.S. Patent No. 6,141,436 (“Srey”), cited by Applicant, in view of Arai et al. U.S. Patent No. 4,332,258 (“Arai”) as applied to claims 1 and 26 above, and further in view of Yollin U.S. Patent No. 5,990,866.**

In regard to claims 3, 5, 28, and 35, Engstrom, Srey, and Arai disclose detecting heart rate from a plurality of sensors disposed on a mobile device (Engstrom column 2 lines 51 – 67, column 3 lines 1 – 16), yet fail to disclose measuring temperature or galvanic skin response. However, Yollin a reference in an analogous art of collecting physiological data, discloses collecting physiological data via at least GSR, heart rate, and temperature sensors (Yollin column 4 lines 2 – 22). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the heart rate sensors of Engstrom, Srey, and Arai with the GSR or

temperature sensors of Yollin, since Yollin discloses that it is known in the art of physiological monitoring to use any number of alternative sensors depending on the breadth and complexity of the physiological information sought (Yollin column 4 lines 2 – 22).

Note to Applicant: See previous action for rejection to unaddressed dependent claims, as they are rejected on substantially the same basis as the Office action of July 9, 2009 by citations to Engstrom.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAI RAJAN whose telephone number is (571)272-3077. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam Yao can be reached on 571-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kai Rajan/  
Examiner, Art Unit 3769

/Henry M. Johnson, III/  
Primary Examiner, Art Unit 3769

September 7, 2011